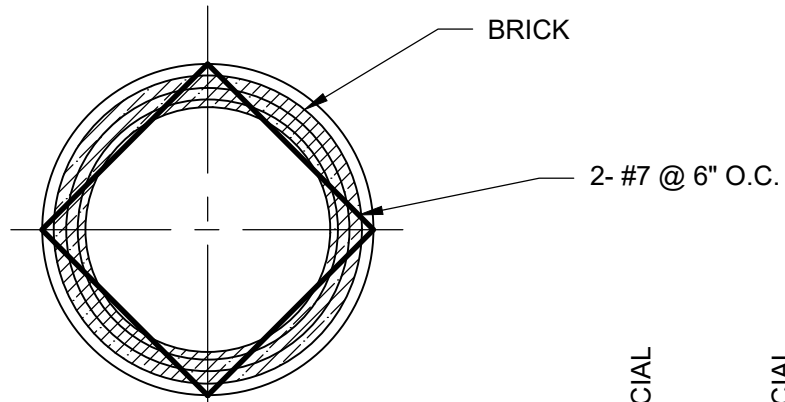
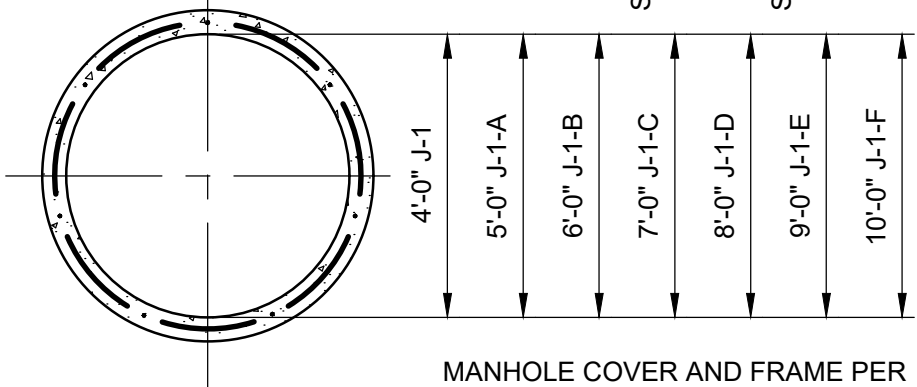


COVER

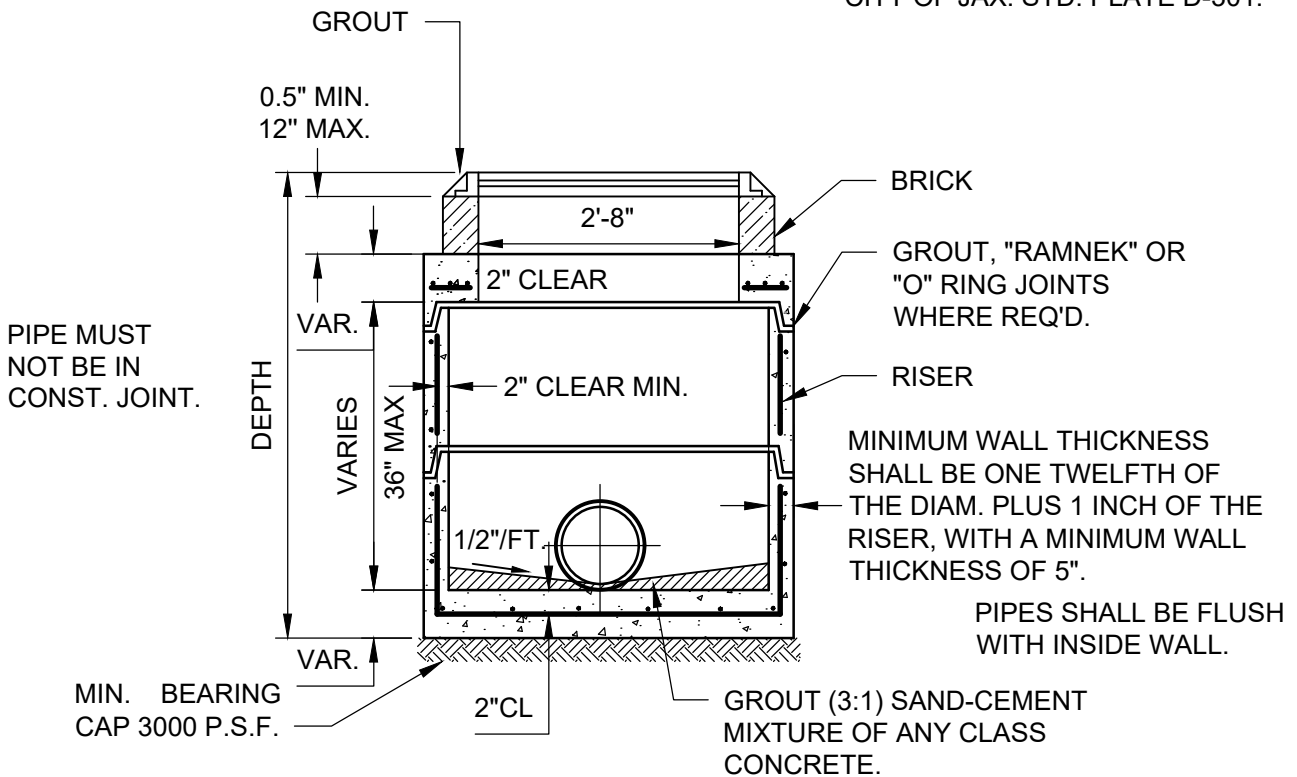


PLAN



PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C 478.

MANHOLE COVER AND FRAME PER CITY OF JAX. STD. PLATE D-301.



NOTE: FOR ADDITIONAL STRUCTURAL DETAILS REFER TO PLATE D-110.

STORMWATER TYPE J-1
THRU J-1-F MANHOLE

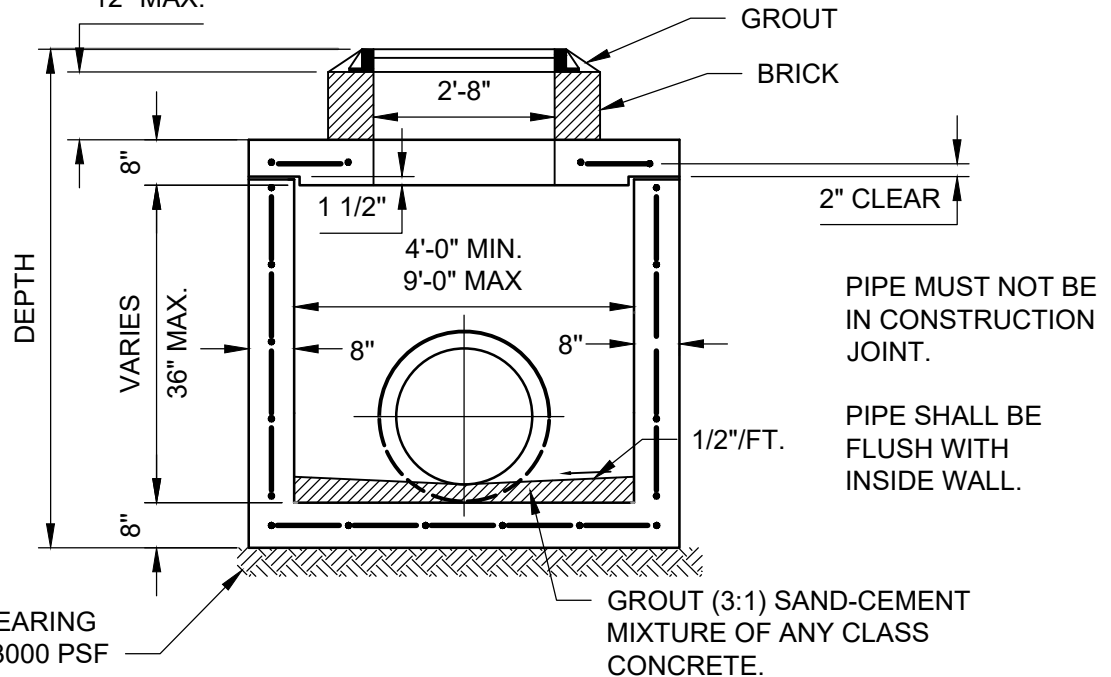
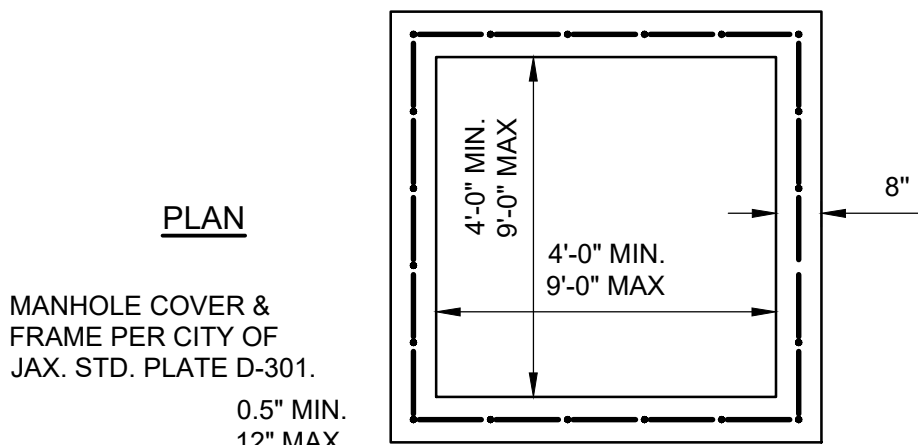
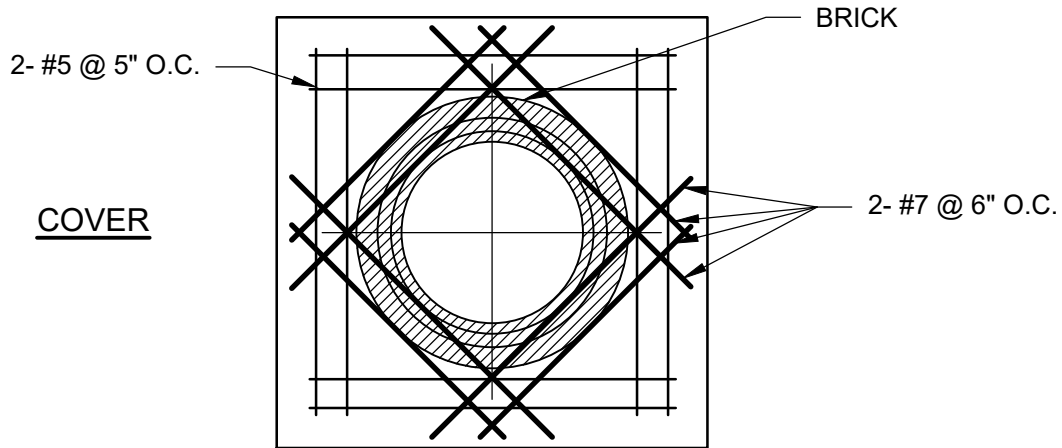
CITY OF
JACKSONVILLE
STANDARD

N.T.S.

PLATE D-101

DATE DRAWN AUG. 1979

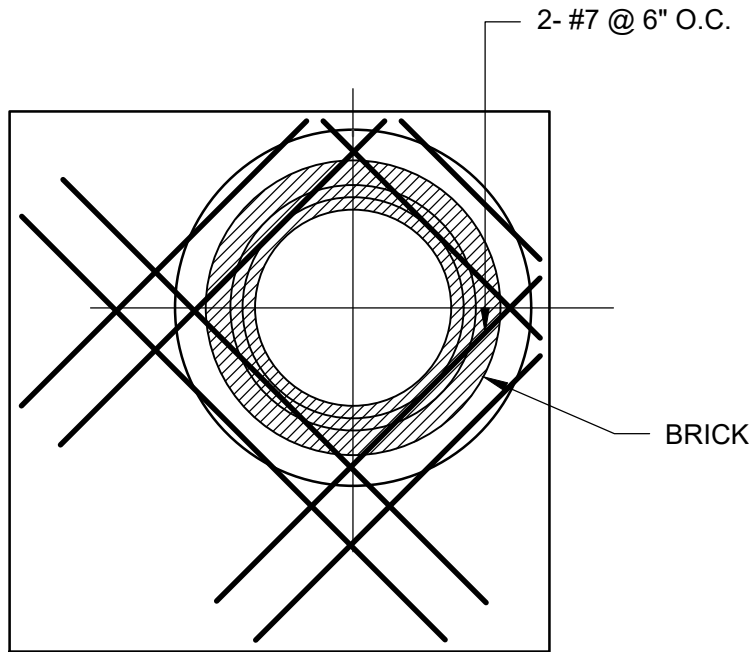
REVISED DATE 7-2-24



NOTE: FOR ADDITIONAL STRUCTURAL DETAIL REFER TO PLATES D-107, D-108, & D-109

STORMWATER TYPE J-2 MANHOLE	CITY OF JACKSONVILLE STANDARD		N.T.S.	PLATE D-102
			DATE DRAWN	1-31-89
			REVISED DATE	7-2-24

PLAN



MANHOLE COVER AND
FRAME PER CITY OF JAX.
STD. PLATE D-301.

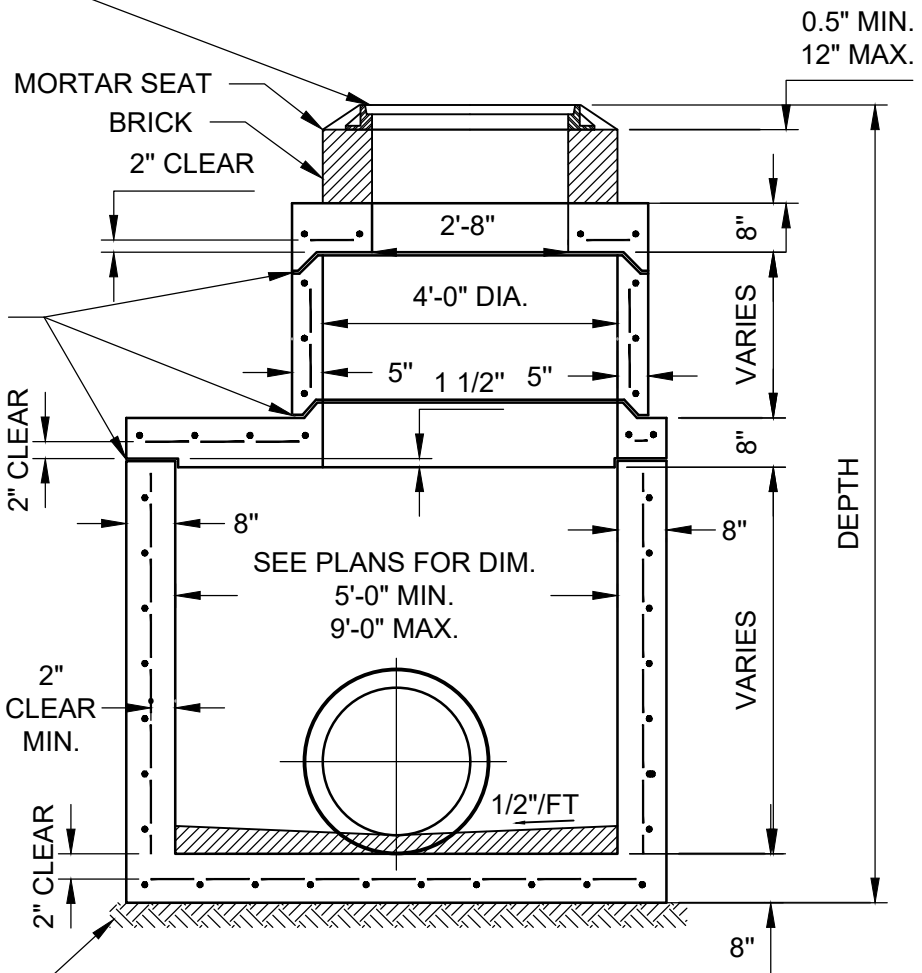
RISER SECTION PRECAST
IN ACCORDANCE WITH
LATEST EDITION OF
A.S.T.M. C478.

GROUT, "RAM-NEK" OR
"O-RING" JOINTS

PIPE MUST NOT BE IN
CONSTRUCTION JOINT.

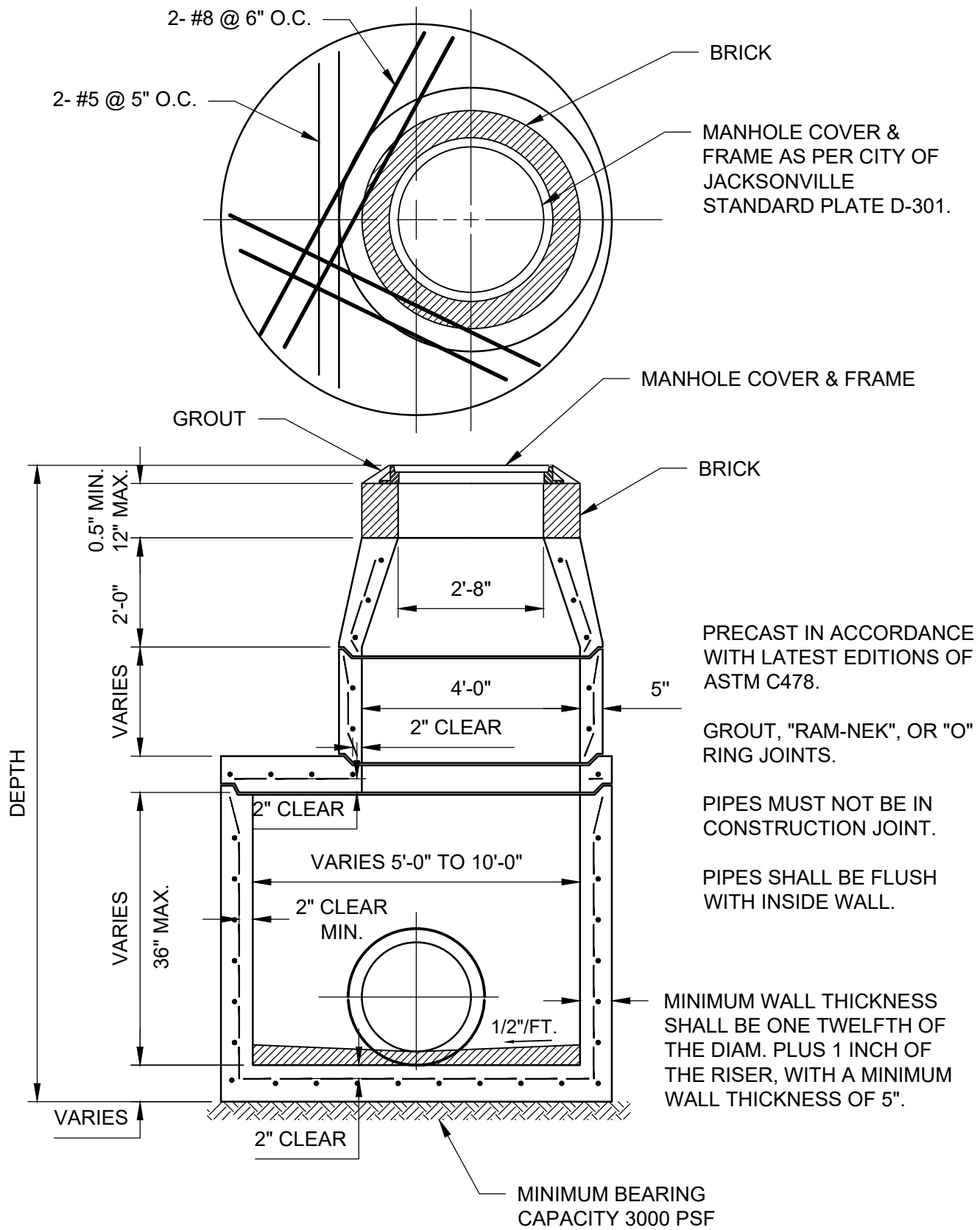
PIPES SHALL BE FLUSH
WITH INSIDE WALL.

MIN. BEARING
CAPACITY 3000 PSF



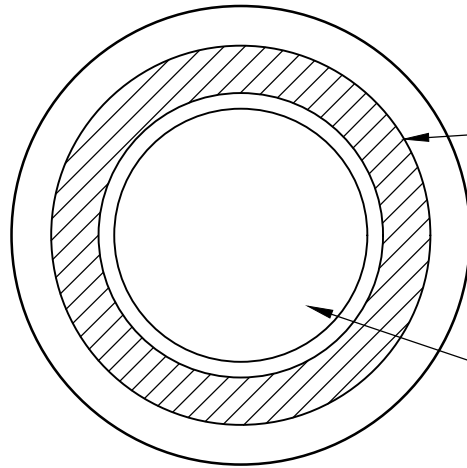
NOTE: FOR ADDITIONAL STRUCTURAL DETAILS REFER TO PLATE D-107, D-108, D-109, & D-110

STORMWATER TYPE J-3 MANHOLE	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-103
		DATE DRAWN	8-3-79
		REVISED DATE	7-2-24



NOTE: FOR ADDITIONAL STRUCTURAL DETAIL REFER TO PLATE D-110.

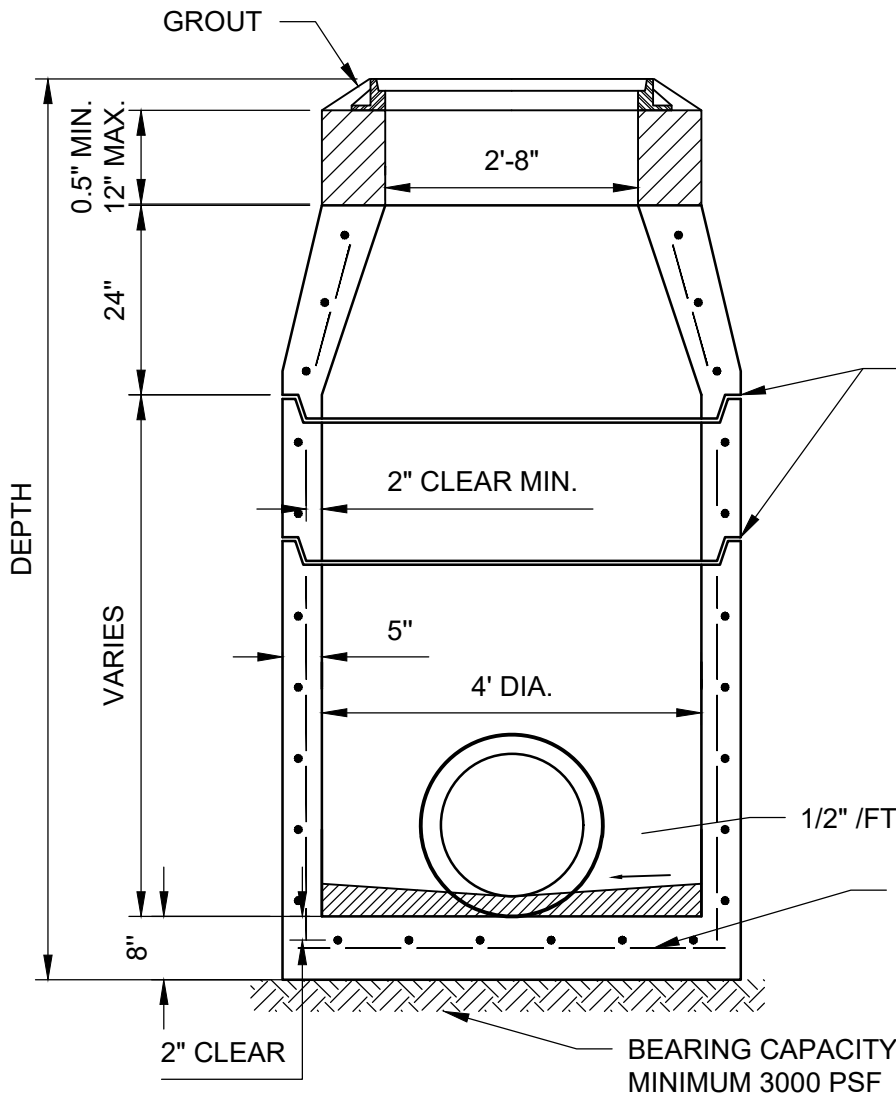
STORMWATER TYPE J-4 MANHOLE	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-104
		DATE DRAWN	2-10-79
		REVISED DATE	7-2-24



BRICK

NOTE: CONC. DESIGN STRENGTH 4000 PSI

MANHOLE TOP/FRAME PER CITY OF JAX. STD. PLATE D-301.



PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C478.

GROUTED, OR "RAM-NEK", OR "O RING" JOINTS.

MAX. SERVICE LINES: 24" RCP THRU 180° 18" RCP THRU DOWN TO 90°

PIPES MUST NOT BE IN CONSTRUCTION JOINT.

PIPES SHALL BE FLUSH WITH INSIDE WALL.

REINFORCE BOTTOM WITH #4 @ 9" O.C. B.W.

BEARING CAPACITY MINIMUM 3000 PSF

NOTE: FOR ADDITIONAL STRUCTURAL DETAIL REFER TO PLATE D-110

STORMWATER TYPE J-5 MANHOLE

CITY OF JACKSONVILLE STANDARD

N.T.S.

PLATE D-105

DATE DRAWN 2-15-89

REVISED DATE 7-2-24

SLAB DESIGNS - SQUARE AND RECTANGULAR STRUCTURES
(ALL SLABS 8" THICK - REINFORCING PARALLEL TO SHORT WAY AND LONG WAY)

LONG-WAY		SHORT-WAY	
SLAB DEPTH	SCHEDULE	SLAB DEPTH	SCHEDULE
SIZE: 4'-0"xUNLIMITED			
≥ 0.5' < 19'	B	≥ 0.5' < 34'	B
19' < 29'	C	34'-40'	C
29'-40'	D		
SIZE: 5x5'			
≥ 0.5' < 3'	C	≥ 0.5' < 3'	C
3' < 19'	B	3' < 19'	B
19' < 28'	C	19' < 28'	C
28' < 38'	D	28' < 38'	D
38'-40'	F	38'-40'	F
SIZE: 5x6'			
≥ 0.5' < 3'	C	≥ 0.5' < 3'	C
3' < 16'	B	3' < 20'	B
16' < 24'	C	20' < 29'	C
24' < 34'	D	29'-40'	D
34'-40'	F		
SIZE: 5x7'			
≥ 0.5' < 3'	C	≥ 0.5' < 3'	C
3' < 14'	B	3' < 22'	B
14' < 21'	C	22' < 33'	C
21' < 39'	D	33'-40'	D
39'-40'	F		
SIZE: 5x8'			
≥ 0.5' < 3'	C	≥ 0.5' < 39'	B
3' < 8'	B	39'-40'	C
8' < 17'	C		
17' < 23'	D		
23'-40'	F		
SIZE: 5x9'			
≥ 0.5' < 3'	C	≥ 0.5' < 32'	B
3' < 8'	B	32'-40'	C
8' < 17'	C		
17' < 23'	D		
23'-40'	F		
SIZE: 6x6'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	D
3' < 4'	C	3' < 4'	C
4' < 14'	B	4' < 14'	B
14' < 21'	C	14' < 21'	C
21' < 28'	D	21' < 28'	D
28'-40'	F	28'-40'	F
SIZE: 6x7'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	D
3' < 4'	C	3' < 4'	C
4' < 12'	B	4' < 15'	B
12' < 19'	C	15' < 21'	C
19' < 26'	D	21' < 30'	D
26'-40'	F	30'-40'	F

LONG-WAY		SHORT-WAY	
SLAB DEPTH	SCHEDULE	SLAB DEPTH	SCHEDULE
SIZE: 6x8'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	D
3' < 4'	C	3' < 4'	C
4' < 7'	B	4' < 16'	B
7' < 16'	C	16' < 23'	C
16' < 23'	D	23' < 32'	D
23'-40'	F	32'-40'	F
SIZE: 6x9'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	D
3' < 15'	C	3' < 4'	C
15' < 21'	D	4' < 18'	B
21' < 27'	E	18' < 27'	C
27'-40'	G	27' < 37'	D
		37'-40'	E
SIZE: 7x7'			
≥ 0.5' < 3'	E	≥ 0.5' < 3'	E
3' < 4'	D	3' < 4'	D
4' < 16'	C	4' < 16'	C
16' < 22'	D	16' < 22'	D
22' < 28'	E	22' < 28'	E
28'-40'	G	28'-40'	G
SIZE: 7x8'			
≥ 0.5' < 3'	E	≥ 0.5' < 3'	E
3' < 4'	D	3' < 4'	D
4' < 15'	C	4' < 17'	C
15' < 21'	D	17' < 23'	D
21' < 27'	E	23' < 29'	E
27'-40'	G	29'-40'	G
SIZE: 7x9'			
≥ 0.5' < 3'	E	≥ 0.5' < 3'	E
3' < 4'	D	3' < 4'	D
4' < 12'	C	4' < 18'	C
12' < 18'	D	18' < 24'	D
18' < 24'	E	24' < 32'	E
24'-40'	G	32'-40'	G
SIZE: 8x8'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	D
3' < 4'	C	3' < 4'	C
4' < 9'	B	4' < 9'	B
9' < 17'	C	9' < 17'	C
17' < 31'	D	17' < 31'	D
31'-40'	G	31'-40'	G
SIZE: 8x9'			
≥ 0.5' < 3'	D	≥ 0.5' < 3'	E
3' < 4'	C	3' < 4'	D
4' < 16'	B	4' < 18'	C
16' < 22'	C	18' < 25'	D
22' < 29'	D	25' < 32'	F
29'-40'	F	32'-40'	G
SIZE: 9x9'			
≥ 0.5' < 3'	F	≥ 0.5' < 3'	F
3' < 14'	C	3' < 14'	C
14' < 20'	D	14' < 20'	D
20' < 26'	E	20' < 26'	E
26'-40'	G	26'-40'	G

SLAB DESIGN SQUARE
AND RECTANGULAR
STRUCTURES

CITY OF
JACKSONVILLE
STANDARD

N.T.S.

PLATE D-108

DATE DRAWN 1-31-79

REVISED DATE 7-2-24

WALL DESIGNS - RECTANGULAR STRUCTURES

HORIZONTAL REINFORCING		VERTICAL REINFORCING	
WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE
SIZE: 3'-0"			
≥ 1.17'-40'	A	≥ 1.17'-40'	B
SIZE: 4'-0"			
≥ 1.17'-40'	A	≥ 1.17'-40'	B
SIZE: 5'-0"			
≥ 1.17'-40'	A	≥ 1.17' < 33'	B
		33'-40'	C
SIZE: 6'-0"			
≥ 1.17'-40'	A	≥ 1.17' < 22'	B
		22'-40'	C
SIZE: 7'-0"			
≥ 1.17'-40'	A	≥ 1.17' < 15'	B
		15' < 25'	C
		25'-40'	D
SIZE: 8'-0"			
≥ 1.17'-40'	A	≥ 1.17' < 11'	B
		11' < 19'	C
		19' < 29'	D
		29'-40'	F
SIZE: 9'-0"			
≥ 1.17'-40'	A	≥ 1.17' < 15'	C
		15' < 22'	D
		22'-40'	F

NOTES:

1. SLAB REINFORCEMENT IS APPROPRIATE FOR TOP, INTERMEDIATE, AND BOTTOM SLABS.
2. SLAB DEPTH IS MEASURED FROM FINISHED GRADE TO TOP OF SLAB.
3. WALL DESIGN DEPTH IS MEASURED TO THE TOP OF THE BOTTOM SLAB FOR BOXES AND TO THE TOP OF THE INTERMEDIATE SLAB FOR RISERS.
4. WALL HEIGHT IS THE DISTANCE BETWEEN TOP OF LOWER SLAB TO BOTTOM OF UPPER SLAB.

REINFORCING SCHEDULE

SCHEDULE	GRADE 60 STEEL OR 65 KSI (WELDED WIRE FABRIC) 2 in /ft
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

WALL DESIGNS
RECTANGULAR
STRUCTURES

**CITY OF
JACKSONVILLE
STANDARD**

N.T.S.

PLATE D-109

DATE DRAWN 2-5-79

REVISED DATE 7-2-24

SLAB DESIGNS - ROUND STRUCTURES

SLAB THICKNESS	SLAB DEPTH	(2 WAYS) REINFORCING SCHEDULE
SIZE: 4'-0"		
≥ 0.5' - 40'	8"	C
SIZE: 5'-0"		
≥ 0.5' < 30'	8"	C
30' - 40'	8"	D
SIZE: 6'-0"		
≥ 0.5' < 8'	8"	B
8' < 18'	8"	C
18' < 30'	8"	D
30' < 37'	8"	E
37' - 40'	8"	G
SIZE: 8'-0"		
≥ 0.5' < 9'	10"	C
9' < 15'	10"	D
15' < 23'	10"	E
23' < 33'	12"	E
33' - 40'	12"	G
SIZE: 10'-0"		
≥ 0.5' < 6'	10"	C
6' < 11'	10"	D
11' < 17'	10"	E
17' < 23'	12"	E
23' - 40'	12"	G
SIZE: 12'-0"		
≥ 0.5' < 6'	12"	C
6' < 11'	12"	D
11' < 16'	12"	E
16' < 20'	14"	E
20' - 40'	14"	G

NOTES:

1. SLAB REINFORCEMENT IS APPROPRIATE FOR TOP, INTERMEDIATE, AND BOTTOM SLABS.
2. SLAB DEPTH IS MEASURED FROM FINISHED GRADE TO TOP OF SLAB.
3. WALL DESIGN DEPTH IS MEASURED TO THE TOP OF THE BOTTOM SLAB FOR BOXES AND TO THE TOP OF THE INTERMEDIATE SLAB FOR RISERS.
4. WALL HEIGHT IS THE DISTANCE BETWEEN TOP OF LOWER SLAB TO BOTTOM OF UPPER SLAB.

REINFORCING SCHEDULE

SCHEDULE	GRADE 60 STEEL OR 65 KSI (WELDED WIRE FABRIC) 2 in /ft
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

SLAB DESIGN ROUND
STRUCTURES

**CITY OF
JACKSONVILLE
STANDARD**

N.T.S.

PLATE D-110

DATE DRAWN 1-31-79

REVISED DATE 7-2-24